APPENDIX A
EXAMPLE SITE CLASSIFICATION AND INITIAL RESPONSE ACTIONS

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Classification 1: Immediate threat to human health, safety, or sensitive environmental receptors.	**Notify appropriate local and other authorities, property owners, and potentially affected parties, and evaluate the need to:**
• Vapor accumulation in structures: Explosive levels or concentrations of vapors that could cause acute health effects are present in a residence or other building	• Evacuate occupants and begin abatement measures (e.g., subsurface ventilation, building pressurization).
• Vapor accumulation in utility lines: Explosive levels of vapors are present in subsurface utility systems, but no other buildings or residences are impacted	• Evacuate immediate vicinity, begin abatement measures (e.g., ventilation).
• Free product release: Free product is present in significant quantities at ground surface, on surface water bodies, in utilities other than water supply lines, or in surface water runoff.	• Prevent further free product migration by appropriate containment measures, institute free-product recovery, restrict area access.
• Public water supply impact: An active public water supply well, public water supply line, public surface water intake, or private drinking water well is impacted or immediately threatened.	• Notify users, provide alternate water supply, hydraulically control contaminated water, and treat water at point-of-use.
• High ambient vapor concentrations: Ambient vapor/particulate concentrations exceed concentrations of concern from an acute exposure or safety viewpoint.	• Install a vapor barrier (e.g., capping, foam), remove the source, or restrict access to affected area.
• Ecological impact: A sensitive habitat or resource (e.g., economically important species, threatened and endangered species, sport fish) is impacted and affected.	• Minimize extent of impact by containment measures, and implement habitat management to minimize exposures.
Classification 2: Short-term threat, (0-2 years), to human health, safety, or sensitive environmental receptors.	**Notify appropriate local and other authorities, property owners, and potentially affected parties, and evaluate the need to:**
• Potential vapor accumulation: There is a potential for explosive vapor levels or concentrations of vapors that could cause acute health effects to accumulate in residence or other buildings.	• Assess the potential for vapor migration (through monitoring/modeling) and remove source, if necessary, or install a vapor migration barrier.
• Contaminated soil in proximity to receptors: Shallow contaminated soils are exposed and open to public access, and dwellings, parks, playgrounds, day-care centers, schools, or similar use facilities are within 500 feet (152 meters) of those soils.	• Remove soils, cover area, or restrict access.
• Non-potable water supply well impacted: A water supply well is impacted or immediately threatened.	• Notify owner/user. Evaluate need for point-of-use water treatment, hydraulic control, or alternate water supply.

• Potential impact to water supply well producing from impacted interval: Groundwater is impacted, and a public or domestic water supply well producing from the impacted aquifer is located within 2 years projected groundwater travel time down gradient from the dissolved plume.	• Institute monitoring. Evaluate if monitored natural attenuation is sufficient or if hydraulic control is needed. MTBE contamination needs to be considered.
• Potential impact to water supply well not producing from impacted interval: Groundwater is impacted, and a public or domestic water supply well producing from a different interval is within the known area of contamination.	• Monitor groundwater well quality and evaluate if control is necessary to prevent vertical migration to the supply well.
• Plume discharge to surface water: Impacted surface water, storm water, or groundwater discharges within 500 feet (152 meters) of a sensitive habitat, or surface water body used for human drinking water or contact recreation.	• Begin containment measures. Restrict access to areas near discharge. Evaluate magnitude and impact of the discharge.
Classification 3: Long-term threat, (>2 years), to human health, safety, or sensitive environmental receptors.	**Notify appropriate local and other authorities, property owners, and potentially affected parties, and evaluate the need to:**
• Potential leachate migration: Subsurface soils (>2 feet below ground surface, 0.9 meters) are impacted, and depth from impacted soils to the first potable aquifer is less than 50 feet (15 meters).	• Monitor groundwater and determine the potential for future migration of chemical(s) of concern to the groundwater.
• Potential impact to potable water well producing from impacted interval: Groundwater is impacted, and potable water supply wells producing from the impacted interval are located more than 2 years projected groundwater travel time from the dissolved plume.	• Monitor the dissolved plume and evaluate the potential for monitored natural attenuation and the need for hydraulic control.
• Potential impact to non-potable water well producing from impacted interval: Groundwater is impacted, and non-potable water supply wells producing from the impacted interval are located more than 2 years projected groundwater travel time from the dissolved plume.	• Identify water usage of well, assess the effect of potential impact, monitor the dissolved plume, and evaluate whether monitored natural attenuation or hydraulic control are appropriate control measures.
• Potential impact to water well not producing from impacted interval: Groundwater is impacted, and water supply wells that do not produce from the impacted interval are located within the extent of chemical(s) of concern.	• Monitor the dissolved plume, notify the user, determine the potential for vertical migration, and determine if any impact is likely.
• Potential surface water or ecological impact: Impacted surface water, storm water, or groundwater discharges within 1500 feet (457 meters) of a sensitive habitat, or surface water body used for human drinking water or contact recreation.	• Investigate current impact on sensitive habitat or surface water body, restrict access to area of discharge, if necessary, and evaluate the need for containment/control measures.

• Contaminated soils exposed: Shallow contaminated soils are exposed and open to public access, and dwellings, parks, playgrounds, day-care centers, schools, or similar use facilities are more than 500 feet (152 meters) from those soils.	• Restrict access to impacted soils.
Classification 4: No demonstrable long-term threat human health, safety, or sensitive environmental receptors.	**Notify appropriate local and other authorities, property owners, and potentially affected parties, and evaluate the need to:**
• Notify appropriate local and other authorities, property owners, and potentially affected parties, and evaluate the need to: Impact to non-potable aquifer: Non-potable aquifer with no existing local use impacted.	• Monitor groundwater and evaluate effect of monitored natural attenuation on dissolved plume migration.
• Low potential for leachate from soils to groundwater: Impacted soils located more than 3 feet (0.9 meters) below ground surface and greater than 50 feet (15 meters) above the nearest groundwater.	• Monitor groundwater and evaluate effect of monitored natural attenuation on leachate migration.
• Low potential for water supply well impact: Groundwater is impacted and wells are located down-gradient outside the known extent of chemical(s) of concern, and they produce from a non-impacted zone.	• Monitor groundwater and evaluate effect of monitored natural attenuation on dissolved plume migration.